ABSTRACT

The invention relates to a method for removing material from a three-dimensional surface (1) of any shape in a multi-layered manner by means of a material removing agent (9) such as a laser that acts in points on a surface. According to said method, a surface structure (2) is removed from the three-dimensional surface (1), the surface is approximated by a polygon network, and raster images are associated with the polygons (19) of the polygon network (18). Said polygons are projected onto the machining region (1)) of the material removing means. A series of superimposed polygon networks being associated with a layer of material, each of the polygon networks being associated with a layer in which material is removed, if the information stored on the projected raster image indicates the planned removal of material. The use of polygon networks (18) for removing material in a multi-layered manner ensures a very precise removal of material from a surface structure (2) of any shape, thus creating a highly precise three-dimensional surface structure.